Advancing Systems Engineering Excellence: The Marshall Systems Engineering Leadership Development Program

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As NASA undertakes increasingly complex projects, the need for expert systems engineers and leaders in systems engineering is becoming more pronounced. As a result of this issue, the Agency has undertaken an initiative to develop more systems engineering leaders through its Systems Engineering Leadership Development Program; however, the NASA Office of the Chief Engineer has also called on the field Centers to develop mechanisms to strengthen their expertise in systems engineering locally. In response to this call, Marshall Space Flight Center (MSFC) has developed a comprehensive development program for aspiring systems engineers and systems engineering leaders.

This presentation will summarize the two-level program, which consists of a combination of training courses and on-the-job, developmental training assignments at the Center to help develop stronger expertise in systems engineering and technical leadership. In addition, it will focus on the success the program has had in its pilot year. The program hosted a formal kickoff event for Level I on October 13, 2009. The first class includes 42 participants from across MSFC and Michoud Assembly Facility (MAF). A formal call for Level II is forthcoming.

With the new Agency focus on research and development of new technologies, having a strong pool of well-trained systems engineers is becoming increasingly more critical. Programs such as the Marshall Systems Engineering Leadership Development Program, as well as those developed at other Centers, help ensure that there is an upcoming generation of trained systems engineers and systems engineering leaders to meet future design challenges.